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PTO/SB/05 (11-00)

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UTILITY PATENT APPLICATION **TRANSMITTAL**

Attorney Docket N	vo. 21046–P004
First Inventor	Behrouz Farhang-Boroujen
Title COMMUNIC	ND APPARATUS FOR SEMI-BLIND ATTON CHANNEL ESTIMATION

(Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Label No. EL743033932US

APPLICATION ELEMENTS			ASSISTANT Commissioner for Patents				
See MPEP chapter 600 concerning utility patent application contents.			ADDRESS TO: Box Patent Application Washington, DC 20231				
Fee Transmittal F	orm (e.g., PTO/SB/17)		7. CD-ROM or CD-R in duplicate, large table or				
(Submit an original and a	duplicate for fee processing) mall entity status.		Computer Program (Appendix)				
2. AA See 37 CFR 1.27.			Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)				
3. Specification (preferred arrangement	[Total Pages 30]		a. Computer Readable Form (CRF)				
- Descriptive title			b. Specification Sequence Listing on:				
	e to Related Applications arding Fed sponsored R & D		i. CD-ROM or CD-R (2 copies); or				
	equence listing, a table, program listing appendix		i i. ☐ paper				
- Background of	the Invention		c. Statements verifying identity of above copies				
- Brief Summary - Brief Descriptio	of the Invention n of the Drawings (if filed)		ACCOMPANYING APPLICATION PARTS				
- Detailed Descri			Assignment Papers (cover sheet & document(s))				
Claim(s)Abstract of the	Disclosure		10. 37 CFR 3.73(b) Statement (when there is an assignee) Power of Attorney				
4. XX Drawing(s) (35 U	I.S.C. 113) Total Sheets 7	1	11. English Translation Document (if applicable)				
5. Oath or Declaration UN:]	12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations				
a. Newly exect	uted (original or copy)		13. Preliminary Amendment				
Copy from a	prior application (37 CFR 1.63 (d)) tion/divisional with Box 18 completed)		14. XXX Return Receipt Postcard (MPEP 503) (Should be specifically itemized)				
	ION OF INVENTOR(S)		15. Certified Copy of Priority Document(s) (if foreign priority is claimed)				
named in t	Itement attached deleting inventor(s) the prior application, see 37 CFR		16 XX Request and Certification under 35 U.S.C. 122				
1.63(d)(2) and 1.33(b).			(b)(2)(B)(i). Applicant must attach form PTO/SB/35				
6. Application Data	Sheet. See 37 CFR 1.76		or its equivalent. 17. Other:				
18. If a CONTINUING APPLI	CATION, check appropriate box, and	supply th	e requisite information below and in a preliminary amendment,				
or in an Application Data She		.,,	, , , , , , , , , , , , , , , , , , , ,				
Continuation	Divisional Continuation-in-part (C	IP)	of prior application No.:/				
Prior application information:	Examiner	of the pri	Group Art Unit: or application, from which an oath or declaration is supplied under				
Box 5b, is considered a part of	f the disclosure of the accompanying cor	ntinuation	or divisional application and is hereby incorporated by reference.				
The incorporation can only be			omitted from the submitted application parts.				
19. CORRESPONDENCE ADDRESS							
Customer Number or Bar Code Label (Insert) customer/No. cr/Attach bar code (label/here) Or Correspondence address below							
Name	COLUMBIA IP LAW GROU	P. LL	C				
	4900 SW Meadows Road						
Address							
City	Lake Oswego	. Sta	te Oregon Zip Code 97035				
Country	USA	Telepho	ne 503-534-2800 Fax 503-534-2804				
Name (Print/Type)	Robert/A. Diehl		Registration No. (Attorney/Agent) 40,992				
Signature		inn					
Jugitature	<i> ~ 4 - .</i> ///	1/1//	/ Date 02/06/01				

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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$) 0.00

Complete if Known				
Application Number	Not Yet Assigned			
Filing Date	February 6, 2001			
First Named Inventor	Behrouz Farhang-Boroujeni			
Examiner Name	Not Yet Assigned			
Group Art Unit	Not Yet Assigned			
Attorney Docket No.	21046-P004			

METHOD OF PAYMENT		FEE CALCULATION (continued)				
1. The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:		ITIONA	L FEES	3		
Deposit		Large		Smal		
Account Number 501569	Fee	Entity Fee	Fee	Entity Fee		
Deposit	Code	(\$)	Code	(\$)	Fee Description	Fee Paid
Account Columbia IP Law Group, LLC	105	130	205	65	Surcharge - late filing fee or oath	
Name	127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	139	130	139	130	Non-English specification	
Applicant claims small entity status. See 37 CFR 1.27	147	2,520	147	2,520	For filing a request for ex parte reexamination	
2. Payment Enclosed:	112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
Check Credit Card Order Other	113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	115	110	215	55	Extension for reply within first month	
	116	390	216	195	Extension for reply within second month	
1. BASIC FILING FEE Large Entity Small Entity	117	890	217	445	Extension for reply within third month	
Fee Fee (\$) Fee Fee Fee Description	118	1,390	218	695	Extension for reply within fourth month	
Code Code (\$) Fee Paid 101 710 201 355 Utility filing fee 355.00	128	1,890	228	945	Extension for reply within fifth month	
106 320 206 160 Design filing fee	119	310	219	155	Notice of Appeal	
107 490 207 245 Plant filing fee	120	310	220	155	Filing a brief in support of an appeal	
108 710 208 355 Reissue filing fee	121	270	221	135	Request for oral hearing	
114 150 214 75 Provisional filing fee	138	1,510	138	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 355.00	140	110	240	55	Petition to revive - unavoidable	
		1,240	241	620	Petition to revive - unintentional	
2. EXTRA CLAIM FEES Fee from		1,240	242	620	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	143	440	243	220	Design issue fee	
Total Claims 41 -20**= 21 X 9.00 = 189.00	144	600	244	300	Plant issue fee	
Independent	122	130	122	130	Petitions to the Commissioner	
	123	130	123	130	Petitions related to provisional applications	
Multiple Dependent = 0.00	126	180	126	180	Submission of Information Disclosure Stmt	
Large Entity Small Entity Fee Fee Fee Fee Fee Description	581	40	581	40	Recording each patent assignment per property (times number of properties)	
Code (\$) Code (\$)	146	710	246	355	Filing a submission after final rejection	
103 18 203 9 Claims in Excess of 20 102 80 202 40 Independent claims in excess of 3					(37 CFR § 1.129(a)) For each additional invention to be	
104 270 204 135 Multiple dependent claim, if not paid	149	710	249	355	examined (37 CFR § 1.129(b))	
109 80 209 40 ** Reissue independent claims over	179	710	279	355	Request for Continued Examination (RCE)	
original patent 110 18 210 9 ** Reissue claims in excess of 20 and over	169	900	169	900	Request for expedited examination of a design application	
original patent	e (specify)					
SUBTOTAL (2) (\$) 229.00 **or number previously paid, if greater; For Reissues, see above	*Reduced	by Basic Fil	ling Fee f	Paiḍ	SUBTOTAL (3) (\$) 0.	00

SUBMITTED BY			-	Complete (if ap	pplicable)
Name (Print/Type)	Robert A. Diehl	Registration No. (Attorney/Agent)	40,992	Telephone	503-534-2800
Signature	Molert A. Ikm/W			Date	February 6, 2001

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REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)

s to respond to a concedion of information diffess it displays a valid civil control flumber.					
First Named Inventor		Behrouz Farhang-Boroujeni			
Title	METHOD AND APPARATUS FOR SEMI-BLIND COMMUNICATION CHANNEL ESTIMATION				
Atty Docket Number		21046-P004			

I hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

2/6/2001 Date

Robert A. Diehl, Reg. No. 40,992
Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).

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